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Original Communications.

STRANGULATED INGUINAL HERNIA.

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Case of Strangulated Inguinal Hernia in a Woman 80 Years old; Operation; Rupture of Intestine; Death in 24 Days.

MRS. M., widow, æt. 80, sent to the Boston Dispensary for a physician, May 12th, 1869. Dr. Lincoln being out of town, we saw the patient for the first time on the afternoon of the above date.

She had had an inguinal hernia thirty or forty years. It had frequently come down, but she had always been able to return it till three days ago, when it got nipped, and she could not get it back. In the right groin, over the external abdominal ring, there was a tumor of the size of an English walnut, firm, tense and tender, neither fluctuating nor giving any impulse on coughing or straining; not affected by ordinary taxis. Considerable pain and vomiting, but not as much as there was yesterday. Pulse 110, regular. No appetite. Bowels not moved for four days. Some subsultus tendinum. Ordered opium, hop fomentations and liquid diet.

May 13th.—Patient weaker. Pulse 112, weak and irregular. Subsultus, and the condition of the nervous system generally, worse. Tumor same. With the assistance of Dr. Beach and Mr. C. B. Brigham, one of our house-surgeons, the patient was etherized, and taxis, ice and position tried for a short time, without making any impression on the tumor. An incision, two inches long, was then made over the long diameter of the tumor, and a careful dissection made down to the sac; this, on being opened, gave exit to about a drachm of bloody serum, and revealed a small piece of omentum and a knuckle of small intestine. The coats of the intestine were only moderately congested; they were thickened and brownish-colored, but we have certainly seen much worse-looking intestines recover their tone after being released by an operation. Hernia easily reduced after nicking the neck of the sac. Wound partially closed with a couple of sutures, and a graduated compress and spica bandage applied. She was thoroughly etherized during taxis, but only very slightly afterwards. She endured the operation well.

14th.—Patient is comfortable and had a fair night, with one grain of opium. Pulse 100, of fair strength. Very little nausea, no vomiting. Abdomen a little tender and tympanitic. Continue hops, opium and enemata of milk. Beef-tea and brandy.

15th.—Pulse 110, stronger and more regular. Abdominal symptoms less. One free stool. Has incontinence of urine.

16th.—Slept all night. Bright and cheerful. No pain. Wound partially united. Takes her food by the mouth and rectum.

17th.—Fourth day after operation. Fæcal matter began to come from the wound this morning. Patient feels well and wants to get up. She is much improved in her general condition; takes her food well and digests it.

She continued to improve for nearly a fortnight, when, on taking a slight cold, she began to fail, and died of exhaustion, June 6th, twenty-four days after the operation.

Physiologically, it was interesting to watch the intestinal discharge from the wound and rectum after the bowel broke. The rectal discharges were always white and of a peculiar odor, neither fæcal nor putrid; quantity and consistence normal. There was no undigested food in them.

The discharge from the wound, supposed to come from the upper part of the small intestine, was thin, of natural color and odor. It oozed out fast or slow, according to the activity of the peristaltic motion of the intestines, and varied from one to eight ounces in twenty-four hours. It was only moderately irritating to the neighboring tissues.

At times, when the nausea and vomiting prevented her taking her nourishment in the usual way, she was fed entirely by the rectum, with milk, beef-tea, &c., which she

always retained remarkably well. In from four to six hours after the injections were begun, the discharges from the groin consisted principally of the injected matter, semi-digested. Partially digested food never came from the wound unless she had been taking injections for some hours; these usually consisted of milk or beef-tea, with a little brandy, and sometimes laudanum. She had a natural stool nearly every day after the third day following the operation, besides the discharge from the groin.

She never gained sufficient strength to justify any attempts to close the opening in the intestine and groin.

Selected Papers.

STRANGULATED HERNIA.

The *Medical Record* of Oct. 15th has the following interesting cases of strangulated hernia. Cases I. and II. are reported by Dr. James L. Little, and Case III. by Dr. F. D. Lente.

Case I.—*Strangulated Inguinal Hernia on left side, in which the protrusion consisted of the Appendix Vermiformis, a portion of the Cæcum, and several inches of the Ileum.*

On January 13th, 1869, I was called to see a child, aged *four months*, which was under treatment, by Dr. E. B. Belden, for gastric disturbance. The doctor had not seen the child for about twenty-four hours previous to my being called in, having been detained by some urgent case. On arrival I found the patient suffering from strangulated inguinal hernia of the *left side*.

The hernia first made its appearance about twelve hours previous to my visit, and had gradually increased in size, owing to the straining caused by the child's crying. The patient had been constantly vomiting for the last three or four hours. On examination the hernial tumor was found to be tense and resonant on percussion.

Taxis was tried and failed. The little patient was thereupon etherized by Dr. Samuel B. Ward, and another attempt at taxis was made, upon the failure of which I proceeded to operate, assisted by Drs. J. L. Campbell and P. C. Cole.

The operation was performed in the usual manner.

On opening the sac the hernia was found to consist of the appendix vermiformis, with a knuckle of the cæcum and about four inches of the ileum. The internal ring being the seat of the stricture, it was enlarged with the hernia knife, and an attempt was made to reduce the protrusion. Here considerable difficulty was met with, owing to the cavity of the pelvis being so very small.

On attempting to push back the intestines, more and more of them were forced out, until about eighteen inches of the ileum protruded from the abdominal cavity.

The child was then raised from the table by his feet, with the head hanging down, and after some trouble the intestines were replaced. Dr. Cole then, with his finger, made pressure over the internal ring, while the wound was closed by means of sutures, and a compress of adhesive plaster, folded with the adhesive side out to prevent it from slipping, was then placed over the external ring and over the inguinal canal, and secured by a spica bandage.

Four hours after the operation a spontaneous discharge from the bowels took place; this was followed by an obstinate diarrhœa, in consequence of which the patient died on the third day after the operation.

Remarks.—This case is one of extreme rarity. Teale, in his admirable work on Hernia, refers to a case mentioned by Sandiford, in which a hernia of the left side was formed by the cæcum, but does not state the age of the patient. With this exception, I have not been able to find a reported case in which this condition existed. In the infant the cavity of the pelvis is small, and the meso-cæcum is proportionately larger than in the adult, and allowing a greater freedom of movement in the cavity of the pelvis, may thus be enabled to descend into a hernial sac on the left side.

Transposition of the viscera, which sometimes occurs, has been suggested to explain this case; but the examination of the intestines at the time of the operation showed that the relation of the appendix vermiformis and the cæcum with the ileum was normal.

Case II.—*Strangulated Hernia of the Tunica Vaginalis, the Testicle being in the Inguinal Canal.*

August 16th, 1868, at 12 M., I was called to see J. P., aged 40, who was suffering from a strangulated hernia.

The man gave the following history:—Has been suffering from rupture for many years; was accustomed to wear a truss during the day, removing it on retiring to bed.

For some time past he had been drinking rather freely, and after rising this morning he went out to get his usual glass of liquor,

neglecting to apply his truss. While out he began to suffer from symptoms of strangulation. After making several unsuccessful attempts to reduce the rupture, Dr. Dumond, the family physician, was called in, and he not being able to relieve the patient by taxis, sent for me. On arrival I found the sufferer with all the symptoms of strangulated hernia—vomiting and severe pain in the vicinity of the umbilicus. On examination I found a large tumor, about the size of an orange, in the right iliac region, just above Poupart's ligament, resembling very much a large femoral hernia, which had turned up over Poupart's ligament. Patient stated that it had always been considered a femoral hernia. On further examination I found that the right testicle was missing; patient remarked that he had never had more than one.

The tumor had an elastic feeling, and was resonant on percussion; the situation of the testicle could not be ascertained.

Was told by the patient that the hernia had never descended into the scrotum. The case was then diagnosticated as an oblique inguinal hernia, confined in the inguinal canal by an undescended testicle. After making an ineffectual attempt to reduce by taxis, and finding that the symptoms were urgent, I deemed it advisable to operate immediately. The patient was etherized by Mr. Hurdsfield, a medical student, taxis was again tried, and failing, the following operation was performed, Dr. Dumond, attending physician, and Drs. White and P. C. Cole assisting.

Operation.—The incision, about four inches in length, was made in the most prominent part of the tumor, parallel with the median line of the body. Cutting the skin and superficial fascia the aponeurosis of the external oblique muscle was then divided upon a director and the hernia immediately brought into view. It consisted of about twelve inches of the small intestine, and was of a dark red color. The testicle, of natural size, was now seen in the wound, in the neighborhood of the external ring. The finger was then passed up into the internal ring, which seemed to be the seat of stricture; this was enlarged by the hernia knife and the intestine returned. The wound was then closed by silver wire sutures, allowing the testicle to remain in its original position, and a compress and spica bandage applied. Ordered one grain of opium, to be taken every three hours.

Five hours after operation:—Patient in good condition; pulse 92; slight tenderness over the abdomen; ordered opium, grain j., every two hours; poultices of linseed meal applied to abdomen.

Twenty hours after:—Pulse 72; patient vomiting occasionally, and appears to have some symptoms of delirium tremens; opium continued, and carbonic acid water given to allay vomiting.

Forty-four hours after operating:—Vomiting has ceased, and general condition somewhat improved; slight erysipelatous inflammation; ordered lead and opium wash.

Seventy-two hours after:—Patient's bowels moved spontaneously, and from this time forth his condition progressed very favorably; the wound suppurated moderately, and in about two weeks after operating he was able to pursue his usual vocation.

Remarks.—This case is similar to the one reported by Dr. Gurdon Buck in the *Record* of the date of July 15, 1869. No distinct peritoneal sac could be found; the peritoneum lining the inguinal canal was adherent to the walls of the canal, so that when the skin and superficial fascia were divided the tendon of the external oblique muscle was exposed, and lifting a small part with the forceps and making it so as to introduce a director, on cutting it the intestine was immediately exposed to view. The testicle, with spermatic cord and intestine, was in the same peritoneal cavity as in congenital hernia.

Case III.—*Strangulated Encysted Hernia of Tunica Vaginalis, complicated with a partially descended Testis, and also with Hydrocele.*

A. H., aged 20 years, a very stout, athletic youth, while making a violent effort at his work, on January 15th, 1869, felt something give way in his left groin, attended by the most intense pain, and almost causing him to faint; he, however, was able to lie on his stone-boat to be drawn home. Upon visiting the patient an hour or so after the accident, I found that he was considerably prostrated, that he had vomited twice, and was in great distress, complaining of severe pain in the right groin; where I found a swelling over the external ring, extending into scrotum, which was the seat of great tumefaction, very tense, but distinctly fluctuating; no gurgling, no impulse on coughing; there was a decided constriction just above the centre of the tumor; no translucency by dioptric test; the exact location of testicle could not be made out. Learned from patient that the testicle had not descended at all into the scrotum until he was 12 years old; could be felt at the external ring some time before. Since then he had been able to move it up and down the scro-

tum, and probably within the ring. He applied to me a couple of years ago with a moderate hydrocele, and was advised to wear a suspensory bandage until it increased so as to require operation. Stated that there had been much less swelling during the past year than before.

Administered ether to complete relaxation, and made persevering attempts at reduction, but unsuccessfully. Ordered an enema, the operation to be followed by a full anodyne, and a bladder of ice applied to the tumor.

Jan. 16th.—Bowels moved freely with the enema. No vomiting, but some nausea. Pulse 100, soft and regular. Dr. Murdock, my assistant, saw the case at this time. No urgent symptoms being present, it was decided to wait.

Jan. 17th.—Pain much increased and located principally about *umbilicus*, some vomiting; no change in tumor. Patient anxious. Etherized patient thoroughly, without making the least impression on the tumor. It was therefore decided to operate at once. Upon incising the integuments from the external ring downwards, the distended *tunica vaginalis* was exposed, and upon being opened, gave exit to several ounces of clear serum. The testicle, much atrophied, was exposed opposite the *ramus* of the *pubes*. Nothing could be seen of the *hernia*; but upon pressing the finger deeply in at the upper extremity of the incision, a small elastic swelling was felt; its investments very thick, being composed of the posterior wall of the *tunica vaginalis testis*, peritoneum, and probably some inflammatory exudation. Upon cutting through this, the small loop of intestine, in a fair condition, was exposed. The stricture was divided with some difficulty, as it was situated at the *internal ring*, and unusually high. The intestine was replaced and retained by compress and spica. The testicle was left where it was found, just below the external ring.

Feb. 11th.—Patient was perfectly comfortable for three or four days, and the wound had almost entirely healed by first intention. On the 23d the bowels were moved by castor oil; and at night he had a rigor, followed by swelling, pain, and tenderness at the seat of the wound, and in the inguinal glands of *both* groins, with *œdema* of integuments of penis. After free poulticing, some of the adhesions at the upper part of the wound gave way, a discharge of pus appeared, and the bad symptoms gradually disappeared. The wound has now healed soundly, and patient is wearing a truss. There is a little fulness at the situation of the testis.

Remarks.—This very rare form of hernia, usually designated, for some unknown reason, as "Infantile," was rendered still more interesting, in this case, by the fact that the *testis* occupied just the position where the hernial protrusion was expected to present itself, on dividing its usual coverings, and also by the coincidence of a regular hydrocele. These complications likewise rendered the diagnosis, at first, a little uncertain, as it was pretty distinctly made out, before the operation, that the testis occupied about the position where it was subsequently found, and an injury of this organ, occupying such a location, would give rise to many of the symptoms complained of. Some apprehension was also felt, after the operation, lest the testis, imprisoned by the consolidation of the tissues about it during the healing process, might occasion future trouble from its exposed situation; but, up to this date, no inconvenience has been experienced, and a truss is worn with perfect comfort.

Reports of Medical Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

CHARLES D. HOMANS, M.D., SECRETARY.

August 23d.—*Dislocation of the Lens through a Rupture of the Sclerotica.*—Dr. Williams reported the case of a man, about 50 years of age, whose crystalline had been dislocated through a rupture in the sclera and was lying beneath the conjunctiva a little beyond the inner border of the iris. The displacement was caused by a blow from a stone. Extraction was at once practised. This is the second instance of this rare accident seen by Dr. W. within six months; the cause in the former case having been a blow from the horn of a cow.

Sept. 13th.—*Operation for Traumatic Cataract; Subsequent threatened Sympathetic Ophthalmia; Removal of Globe and discovery of a Foreign Body in its Interior.* Dr. H. Derby reported the case.

A. R., by trade a blacksmith, was at work April 19th, hammering iron, when a piece struck his left eye. I saw him four days later. The left globe was considerably reddened. An incised wound, between one and two lines in length, existed at the upper-outer edge of cornea, to which wound the iris was adherent. The iris itself was divided at this point, one of its split edges

being incarcerated in the wound. The lens was wholly opaque, a fragment projecting through the cleft in the iris.

There was no diminution of tension and excellent perception of light.

Two courses of action were presented under the existing circumstances. If the iron was now lodged in the globe, the removal of the eye alone would prevent subsequent implication of its fellow. But if the foreign substance had inflicted a simple wound, without penetrating to the interior of the organ, a removal of the cataract would probably restore a degree of vision that would prove of material service. It was decided to give the patient the benefit of the doubt, and the cataract was removed, April 24th, by the peripheric linear method of Graefe, the mode of operation now generally followed.

Some cortical substance was necessarily left behind, owing to a premature escape of vitreous. No pain or inflammation ensued. May 21st, nearly a month after the operation, the pupil was found to be filled with membrane streaked with blood, the perception of light being unequivocal, but still only quantitative.

Aug. 30th.—There had been some pain. I found considerable ciliary redness. The perception of light remained as before. No view of the interior of the eye could be obtained, owing to the membrane in the pupil. But the sound eye had begun to exhibit signs of approaching sympathetic ophthalmia, such as photophobia, lachrymation, and inability to support continued use.

It being thus rendered probable that the foreign body was lodged in the interior of the globe, enucleation was advised and performed Sept. 3d. On subsequent examination, a fragment of iron, nearly a line square, was found in immediate contact with the retina, nearly opposite the insertion of the inferior oblique muscle.

This history illustrates the supreme importance of diligently following up all traumatic cases where there is any doubt as to whether the foreign body has succeeded in effecting a lodgment. In the present instance, the patient is well and abundantly capable of following his ordinary trade. Had he happened to elude observation a few weeks longer, it is probable that incurable blindness would have resulted, and that he would have become a permanent charge on the community.

Bibliographical Notices.

The Jurisprudence of Medicine in its Relations to the Law of Contracts, Torts and Evidence, with a Supplement on the Liabilities of Vendors of Drugs. By John Ordronaux, LL.B., M.D., &c. &c. Philadelphia: T. & J. W. Johnson & Co. 1869.

We confess that we came to the perusal of this work with no favorable prepossessions. Books heretofore written with the design of combining the subject-matter of the two distinct professions of law and medicine have, as a rule, been melancholy failures, useless alike to the lawyer and to the medical man. They are apt to wear the appearance of having been gotten up on the famous principle on which a treatise on Chinese Metaphysics was once compiled. The author read in the Encyclopœdia under the head of China, and again under the head of Metaphysics, and then *combined the information* thus obtained. But Dr. Ordronaux, who seems to have a right to claim a knowledge in his own person of both law and medicine, has done better than his predecessors, and has succeeded in producing a work of real merit. He covers thoroughly the ground which he undertakes to cover. He gives the legal element the preponderance over the medical, and he is clearly right in so doing. Nothing can be more crude and absurd than the medical treatises with occasional meaningless references to law cases which are the necessary result of the opposite system.

The grand fault of the book is one inseparable from the subject itself, and which the author himself indicates in his Preface. There is not, in fact, a very great quantity of positive law concerning physicians, as a class in society, and concerning sellers of drugs in contradistinction to vendors of other articles. What law there is doubtless is both interesting and valuable, and deserves to be collected and arranged, as Dr. Ordronaux has done it, for the benefit of the practitioners in each profession. But naturally, almost inevitably, the Doctor has been led into "making law," as the technical phrase goes; that is to say, he has laid down as law rules and doctrines which have never been actually declared to be law in adjudicated cases. His views are usually founded upon his notions of justice and of what ought to be, and what might be expected to be, sustained by the courts.

But until they have been thus sustained they are still open to the possibility of litigation and to that degree of doubt which is always attendant upon questions apparently the most simple, when legal subtlety is brought to bear upon them. Lawyers, using the book, are in no danger of being deceived by confounding speculative assertions with established law. But physicians, seeking to guide themselves by it, should bear in mind that only when the Doctor's text is supported by a reference to a legal cause can they feel absolutely certain of its soundness.

The chapters upon Fees and Malpractice are perhaps the most interesting, and not the least valuable in the work. There is no doubt, of course, that a physician may now sue and recover pay for his professional services. The romantic old notion of an *honorarium* has long since been exploded. A good suggestion is made to the effect that he should, in making out his bill to the patient, make it out by particular items of visits, with the date of each. The physician can be allowed to recover the sum claimed by him only upon proof of each one of the various items going to make up that sum total. He is on precisely the like footing with any member of the lay community who presents a bill for the sale of a number of different articles or the performance of a variety of jobs. He must prove each one individually. It is probable that no custom in the profession could ever be admitted in evidence, even if it in fact existed, by which a physician could be exonerated from this universal necessity. If, then, he must keep his books with accuracy for this purpose and must produce them if required, why not avoid the chance of a dispute in the outset by giving to the patient such a convincing document that he will not have any excuse for questioning it?

Upon malpractice we are surprised that the doctor has not found more cases to cite. We should have supposed that suits upon this ground were not unfrequent. But we are content to believe that he has found all that have got into the reports. His doctrine that an error in judgment, if not so gross as to indicate an utter incapacity in the physician to act professionally at all, must not be so harshly construed as to make him liable to his patient in damages, is sound and good. What is gross incapacity cannot be laid down in abstract terms, but must be decided by a jury in every case which shall come before them upon the merits of that individual case. The Doctor seems to fear that such suits may be too easily successful and so too tempting to angry patients who deem themselves ill-used, or pretend to deem themselves so, without just cause, and often for the purpose of extortion. Our own experience has been that it is one of the most difficult things in the world to fasten malpractice upon any physician of tolerably respectable standing. The members of the profession naturally stand by each other in their testimony. Many swear that the accused brother did rightly, for they know not how soon his case may be their own, and they feel the need of class-defence, so to speak. The jury think that "doctors disagree." The burden is on the plaintiff to prove the malpractice, and the jurors in the face of conflicting evidence very properly feel unwilling to say that they are convinced that he has done so. Suits for this cause of action would be much more frequent than they in fact are, were they so easily gained as the Doctor seems to think.*

Upon the whole, the book is an excellent one, and we take pleasure in recommending it to lawyers, and even more especially to physicians, who will learn from it much that will interest them in relation to their legal duties and privileges.

JURISCONSULTUS.

Sleep and its Derangements. By WILLIAM A. HAMMOND, M.D., &c. &c. Philadelphia: J. B. Lippincott & Co. 12mo. Pp. 318.

THIS is an elegant volume, consisting of clear type, beautiful paper and tasteful binding. It is of precisely the right size to hold conveniently, and is replete with instruction and entertainment. The author tells us in his preface that "the basis of this little volume is a paper on Insomnia, published in the *New York Medical Journal* in May and June, 1865. This was subsequently enlarged and published in a separate form, under the title 'Wakefulness, with an Introductory Chapter on the Physiology of Sleep.'"

The Contents are:—The Necessity for Sleep, The Causes of Sleep, The Physical Phenomena of Sleep, The State of the Mind during Sleep, The Physiology of Dreams, Morbid Dreams, Somnambulism, The Pathology of Wakefulness, The Exciting

* Yet physicians have been stripped of every dollar they owned, by convictions for malpractice, when we have good reason to believe that what was made to appear unskilful or neglectful treatment was the inevitable result of injury. It is not the charlatans who are usually made to suffer.—ED.

Causes of Wakefulness, Somnolence, Somnolentia, or Sleep Drunkenness, Appendix.

In the chapter on "The Causes of Sleep," the condition of the brain during sleep is shown and contrasted with its state when stupor is present. "Perhaps no one agent so distinctly points out the difference between sleep and stupor as opium and its several preparations. A small dose of this medicine acting as a stimulant increases the activity of the cerebral circulation, and excites a corresponding increase in the rapidity and brilliancy of our thoughts. A larger dose lessens the amount of blood in the brain, and induces sleep. A very large dose sometimes diminishes the power of the whole nervous system, lessens the activity of the respiratory function, and hence allows blood which has not been properly subjected to the influence of the oxygen of the atmosphere to circulate through the vessels of the brain. There is nothing in the opium itself which produces excitement, sleep, or stupor, by any direct action upon the brain. All its effects are due to its influence on the heart and blood-vessels, through the medium, however, of the nervous system. This point can be made plainer by adducing the results of some experiments which I have lately performed.

"*Experiment.*—I placed three dogs of about the same size under the influence of chloroform, and removed from each a portion of the upper surface of the skull an inch square. The dura mater was also removed, and the brain exposed. After the effects of the chloroform had passed off—some three hours subsequent to the operation—I administered to number one the fourth of a grain of opium, to number two a grain, and to number three two grains. The brain of each was at the time in a perfectly natural condition.

"At first the circulation of the blood in the brain was rendered more active, and the respiration became more hurried. The blood-vessels, as seen through the openings in the skulls, were fuller and redder than before the opium was given, and the brain of each animal rose through the hole in the cranium. Very soon, however, the uniformity which prevailed in these respects was destroyed. In number one the vessels remained moderately distended and florid for almost an hour, and then the brain slowly regained its ordinary appearance. In number two the active congestion passed off in less than half an hour, and was succeeded by a condition of very decided shrinking, the surface of the brain having fallen below the surface of the skull, and become pale. As these changes supervened, the animal gradually sank into a sound sleep, from which it could easily be awakened. In number three the surface of the brain became dark, almost black, from the circulation of blood containing a superabundance of carbon, and owing to diminished action of the heart and vessels it sank below the level of the opening, showing, therefore, a diminished amount of blood in its tissue. At the same time the number of respirations per minute fell from 26 to 14, and they were much weaker than before. A condition of complete stupor was also induced, from which the animal could not be aroused. It persisted for two hours. During its continuance, sensation of all kind was abolished, and the power of motion was altogether lost.

"It might be supposed that the conditions present in numbers two and three differed only in degree. That this was not the case is shown by the following experiment:—

Experiment.—To the dogs two and three I administered on the following day, as before, one and two grains of opium respectively. As soon as the effects began to be manifested upon the condition of the brain, I opened the trachea of each, and, inserting the nozzle of a bellows, began the process of artificial respiration. In both dogs the congestion of the blood-vessels of the brain disappeared. The brain became collapsed, and the animals fell into a sound sleep, from which they were easily awakened. If the action of the bellows was stopped and the animals were left to their own respiratory efforts, no change ensued in number two, but in number three the surface of the brain became dark, and stupor resulted.

"In order to be perfectly assured upon the subject, I proceeded as follows with another dog:—

"*Experiment.*—The animal was trephined as was the others, and five grains of opium given. At the same time the trachea was opened and the process of artificial respiration instituted. The brain became slightly congested, then collapsed, and sleep ensued. The sleep was sound, but the animal was easily awakened by tickling its ear. After I had continued the process for an hour and a quarter, I removed the nozzle of the bellows, and allowed the animal to breathe for itself. Immediately the vessels of the brain were filled with black blood, and the surface of the brain assumed a very dark appearance.

"The dog could no longer be aroused, and died one hour and a quarter after the process was stopped.

"I have only stated those points of the experiments cited which bear upon the subject under consideration, reserving for another occasion others of great interest. It is, however, shown that a small dose of opium excites the mind, because it increases the amount of blood in the brain; that a moderate dose causes sleep because it lessens the amount of blood; and that a large dose produces stupor by impeding the respiratory process, and hence allowing blood loaded with carbon, and therefore poisonous, to circulate through the brain.

"It is also shown that the condition of the brain during stupor is very different from that which exists during sleep. In the one case its vessels are loaded with dark blood; in the other they are comparatively empty, and the blood remains florid.

"I think it will be sufficiently established, in the course of these remarks, that sleep is directly caused by the circulation of a less quantity of blood through the cerebral tissues than traverses them while we are awake. This is the immediate cause of healthy sleep. Its exciting cause is, as we have seen, the necessity for repair."

Subsequently Dr. Hammond says:—"But the most philosophical and most carefully digested memoir upon the proximate cause of sleep, which has yet been published, is that of Mr. Durham. Although my own experiments in the same direction, and which will be hereafter detailed, were of prior date, I cheerfully yield all the honor which may attach to the determination of the question under consideration to this gentleman, who has not only worked it out independently, but has anticipated me several years in the publication, besides carrying his researches to a much further point than my own extended."

Further on he remarks:—"Having thus, in as succinct a manner as possible, brought forward the principal observations relative to the immediate cause of sleep, which up to the present time have been published, I come, in the next place, to detail the result of my own researches."

Those researches he proceeds to describe. For an account of them we must refer to the book.

"A most interesting comparison between the effect of ether and that of chloroform on the brain was thus instituted. An opening was made in the skull of a dog so as to expose the dura mater to the extent of a full square inch. Two hours subsequently the animal was again etherized, in order that the influence of the ether upon the cerebral circulation might be observed from the commencement. At the time the dog was awake, and had a few minutes previously eaten a little meat and drank a small quantity of water. The brain protruded through the opening in the skull, and its surface was of a pink hue, with numerous red vessels ramifying over it. The ether was administered by applying to the muzzle of the animal a towel folded into the shape of a funnel, and containing a small sponge saturated with the agent.

"As soon as the dog commenced to inspire the ether, the appearance of the brain underwent a change of color, and its volume became less. As the process of etherization was continued, the color of the surface darkened to a deep purple, and it ceased to protrude through the opening. Finally, when a state of complete anæsthesia was reached, it was perceived that the surface of the brain was far below the level of the cranial fissure, and that its vessels conveyed black blood alone.

"Gradually the animal regained its consciousness; the vessels resumed their red color, and the brain was again elevated to its former position. In this last experiment there did not appear to be any congestion of the brain. Had this condition existed, it would have been difficult to account for the diminution in bulk, which certainly took place. There was evidently less blood in the cerebral tissue than there had been previously at the etherization; but this blood, instead of being oxygenated, was loaded with excrementitial matters, and consequently was not fitted to maintain the brain in a condition of activity.

"The following morning, the dog being quite lively, I removed the sutures which had been placed in the skin, covering the hole in the cranium, with the view of ascertaining the effects of chloroform upon the brain, when introduced into the system by inhalation. Suppuration had not yet taken place, and the parts were in good condition. The opening in the skull was completely filled by the brain, and the surface of the latter was traversed by a great many small vessels carrying red blood. The chloroform was administered in the same way in which the ether had been given the previous day.

"In a few seconds the change in color of the blood circulating in the vessels began to take place, but there was no sinking of the brain below the level of the chasm in the skull. On the contrary, its protrusion

was greater than before the commencement of the experiment. There was thus not only unoxygenated blood circulating to too great an extent through the brain, but there was very decided congestion."

As to the state of mind during sleep, Dr. Hammond concludes thus :—

"1. Feeling, embracing sensation and emotion, is suspended, so far as the first is concerned ; but is in full action as regards the second. We do not see, hear, smell, taste or enjoy the sense of touch in sleep, although the brain may be aroused into activity and we may awake through the excitations conveyed to it by the special senses. The emotions have full play, unrestrained by the will and governed only by the imagination.

"2. The Will or Volition is entirely suspended.

"3. The Thought or Intellect is variously affected in its different powers. The imagination is active, and the memory may be exercised to a great extent ; but the judgment, perception, conception, abstraction, and reason are weakened, and sometimes altogether lost."

In the chapter on "Morbid Dreams," Dr. Hammond says :—"Perhaps no one medicine is so uniformly successful in the ordinary forms of nightmare as the bromide of potassium, administered in doses of from twenty to forty grains, three times a day. I have seen a number of cases which had resisted all hygienic measures, and the simple removal of the apparent cause, yield to a few doses of this remedy."

The chapter on Somnambulism is a complete monograph in itself. Full of suggestion, it furnishes much food for thought. In this somnambulic condition the author assumes that "the sense of touch is very differently affected, for so far from being diminished in its action, it is invariably unduly exalted. Though the eyes do not see, the ears hear, the tongue taste, or the nose smell, the somnambulist has one sense which is fully awake, and by which he is enabled to guide himself through the most devious passages in dangerous paths.

"In this fact it appears to me we have a strong argument in favor of the theory of somnambulism which I have already referred to, and which appears to me to be supported by much additional evidence. I propose this view not without hesitation ; but much study of the phenomena of somnambulism, and of analogous states of the nervous system, has certainly tended to convince me of its general correctness, and I am not without the hope that other students of neurology will find it reconcilable with their observations and experiments.

"In my opinion, somnambulism is a condition of the organism in which through profound sleep the action of the encephalic ganglia is so materially lessened that the spinal cord becomes able to control and direct the body in its movements."

In another place he says :—"As regards the power of the spinal cord to supply the nervous force requisite for the performance of such actions as those specified [in somnambulism], I do not think there can be any question. Much observation and many experiments have convinced me that the importance of the spinal cord as a centre of intellection and volition has been unwarrantably ignored. It is of course not a matter for doubt that the faculty of consciousness is latent in the spinal cord so long as the brain is in a state of activity, and that the faculty of memory does not reside in it at all. When the brain acts, it ordinarily assumes the control of the cord ; but there are times, especially during the course of certain diseases, when the latter obtains the mastery over the superior organ and dominates with terrible power.

"The actions initiated by the spinal cord are more or less automatic in their character—though not altogether so. The motions of a frog deprived of its brain, show a certain amount of intellection and volition. That they are not more extensive is probably due to the fact that all the organs of the senses, except that of touch, have been removed with the brain. In persons engaged in intense thought and performing actions not in accordance therewith, the impressions made upon the organs of the senses are not appreciated by the brain, but pass through its substance to the spinal cord with which they are in connection by continuity of structure, and which initiates the subsequent actions."

This theory is bold in the extreme. It has long been held that automatic function resides in the spinal cord ; and further, as Carpenter says, that "the habitual movements of locomotion, and others which have become 'secondarily automatic,' may be performed by man (under particular circumstances) through the spinal cord alone, under the guidance and direction of the sensorial centres, or even without such guidance." But, comparative anatomy has taught us that the cerebrum is *the* seat of the mind. Yet, this proposition, we take it, may still stand, though the statement be

superadded that the cerebrum is *reinforced* in some of its functions by other parts of the nervous system.

Thus, the theory of Gall that the *cerebellum* is the seat of the sexual instinct and of the reflex actions necessary to its activity having been given over; and the doctrine of Flourens that the function of the organ is to coördinate complicated muscular actions having been called in question by Hammond and S. Weir Mitchell; we have been recently asked by the latter observer to believe that the cerebellum is "a great reinforcing organ, capable of being more or less used in *volitional muscular action*." Now Dr. Hammond may, with equal right, we presume, theorize that the spinal cord is also a reinforcing organ to the cerebrum, and that it is at times concerned in intellection and volition. It remains for him to prove the fact, or to show its probability. The latter task he has undertaken in this book.

He states that "in regard to the *treatment* of somnambulism there is not much to be said. In the great majority of cases the affection yields readily to appropriate measures; the most efficacious of which consists in means adapted to break up the habit. This may be done by waking the patient before the expected paroxysm, or by placing a tub of cold water so that the feet will be put into it on the attempt to leave the bed. Full exercise in the open air, the avoidance of luxurious habits, and sleeping with the head well raised, are always beneficial.

"Of medicines, I have no experience except with the bromide of potassium, and those calculated to improve the tone of the nervous system. The former I have used in two cases with entire success."

An abstract of the chapter on the "Treatment of Wakefulness"—that chapter consisting more or less of a lecture delivered by Dr. Hammond some time since—was given in this Journal Dec. 31st, 1868; and has lately been copied into the *Dublin Medical Press and Circular*.

On the whole, we think the treatise on "Sleep and its Derangements" well worthy the accomplished Editor of the *Quarterly Journal of Psychological Medicine and Medical Jurisprudence*.

The London *Medical Times and Gazette* reports a case of double aneurism affecting the right external iliac and femoral and the right popliteal arteries, cured by pressure upon the common iliac and the femoral arteries.

Medical and Surgical Journal.

Boston: Thursday, November 18, 1869.

THE PROPOSED FILLING OF CHARLES RIVER.

We copy from the *Boston Daily Advertiser* of November 9th the medical testimony with reference to the proposed filling of the Charles River basin from the Mill-dam to Cambridge bridge. We do this because of the vast importance of the matter from a sanitary point of view. We invoke the influence of the medical profession throughout the State against this mad project.

An adjourned hearing on the proposed plan for filling in a portion of the tidal basin of Charles River in rear of Beacon Street, was held in the Green Room at the State House yesterday forenoon. The Hon. F. W. Bird presided.

Dr. Oliver Wendell Holmes was the first witness called. He said that as a resident and a moderate property owner in Charles Street, he was deeply interested in the preservation of the great ventilating area of Charles River. He would be one of the very many citizens of Boston who would be deeply affected in mind, body and estate if the proposed plan was carried out; in mind, as losing one of the principal comforts and enjoyments of their lives; in body, as being cut off from the great air-reservoir to which in the hotter months they looked as the safeguard of health; in estate, because they had invested their property and their children's inheritance on the faith of a line which they believed to come practically under the safeguard of that ancient commination, "Cursed be he that removeth his neighbor's landmark; and all the people shall say amen."

He was not alone in danger from this threatened calamity. A very large number of persons, among them clergymen, women of moderate means, new residents and long-respected citizens, who had sought a salubrious home by the water-side, would be irreparably injured by the project. It was not extravagant to say that nothing short of a convulsion of nature—an earthquake, an inundation—a great fire, or the invasion of a hostile army, would produce greater dismay, or entail more insupportable losses than the realization of this revolutionary project. Leaving out of sight the law, equity and financial aspect of the question, and regarding the matter in a

medical point of view, the whole city, especially its western and northwestern sections, was interested in the preservation of this water area over which the southern and westerly winds, the hot and sickly winds of summer, blew cooled and purified. He could show by evidence of medical men, that the sanitary effects of the breeze from the water area were distinctly felt and recognized as far as Tremont Street on the southeast border of the Common, and north and east as far as the Massachusetts General Hospital, and it could not be doubted that its beneficent influence extended in some degree over the whole peninsula.

It would not do to talk about the tenants of this or that row of costly houses as being alone chiefly interested. Many of them, during the summer, were at the seaside or in rural districts. The great body of the residents of this section were dependent on the cooling winds of this ventilating area for such comfort and health as the hot months permitted them to enjoy in their modest dwellings.

The effect, then, of the proposed filling in would be that Charles Street and the streets east of it would receive a heated and very probably insalubrious air in place of the cool, wholesome breeze over this lake of ever-renewed sea-water.

The land gained by the filling in would be brought close to the manufacturing, noisy and smoky districts of Cambridgeport, and no expensive dwellings would be erected there. They must expect, then, to see the new territory occupied by noisy and smoky workshops, side by side with an inferior class of dwellings. They would rest on a basin of mud so nearly semi-fluid that, as Mr. Bosehke said, the sea-wall would have to be buttressed to withstand the pressure of the perilous stuff it contained. The breezes that came over this quagmire, with its probable sources of smoke and gaseous products, would be a poor substitute for the present sweet and wholesome air produced by this reservoir.

To the inhabitants of Charles street and neighborhood, the air from this sheet of water was the very breath of life in the sickly season. West Boston Bridge, where the breeze was most felt, was a kind of out-of-door open-air hospital. Towards the close of a sultry day they might see poor mothers carrying their children to breathe the cool, pure air over the salt water.

A pure atmosphere was a matter of life and death to young children. For this he might refer to Dr. Dunglison's Practice of Medicine. In Dr. Collins's work, republished by the express authority of the Massachusetts Medical Society, it is calculated on solid data, that sixteen thousand children's lives have been saved, in about fifty years, in a single great hospital, by introducing a simple method of ventilation. He had no doubt the suppression of this ventilating area, as proposed, would cost thousands of infants' lives, to say nothing of its effects on adults. Dr. Holmes then referred to the writings of Mr. Chadwick and Dr. Youmans in confirmation of his statements, and proceeded to argue that a vitiated air, consequent on the proposed filling up, would have most unfavorable and unfortunate results on the patients of the Massachusetts General Hospital, the Eye and Ear Infirmary, and the Asylum for Aged Females. He confidently appealed to the officers of those institutions, with whom he had consulted, to confirm his statements.

The more they examined a great city the more they would see that it had a collective life like individual organized beings. It must have its food and its excretions, its brain in its municipal government, its eyes and ears to warn it and direct it, its muscles in the shape of its police and other active servants, and, above all, it must have its breathing organs. A closely-built city with no internal air-spaces might be compared to a fish or reptile which breathed through its gills; but a city inclosing large air spaces, to an animal breathing by lungs. Boston was peculiarly favored by having both sets of organs. The Common and Public Garden were one lung, and the water park the other. The projected plan seemed to him like a proposal to cut out one lung and sell it as the lights and liver of four-footed beasts were sold in the market. It was proposed that the State—for a consideration—should perform this operation on the strongest and fairest of her children. He seemed to hear the clink of thirty pieces of silver rattled in her ear to see whether she would be tempted to murder her offspring.

Dr. Holmes then spoke of the noble estuary of Charles River as being a crown of beauty and a source of pleasure to the city.

He then called the attention of the committee to a view of the case that had been strongly expressed in some quarters. There were legal rights, the exercise of which was the meanest and most aggravated of wrongs, because carried out under the protection of an irresistible power, without any risk to the actor, and because there was no remedy but silent submission. He

knew of mean men, but he did not believe in a mean community of American men, and the good people of Massachusetts did not form such a community.

The committee would pardon him for alluding to an impression widely prevalent that political managers were waiting to raise a cry of more money! to pay State taxes from the sale of city lands.

He believed that the project could be shown to be rash financially, dangerous to the harbor, threatening to the public health, ruinous to the beauty of their capital, unjust to the city and dishonorable to the Commonwealth.

The remonstrants never wished to see the State in a condition to justify the application of the famous verse (a little altered)

"Down a river did glide with wind and tide
A pig with vast celerity.
And the devil he grinned, for he saw all the while
How it cut its own throat, and he thought with a smile,
Of the Bay State's financial prosperity."

In reply to questions by the committee, Dr. Holmes said he was not opposed to any *improvement* in Charles River, or elsewhere.

Dr. Holmes then stated that such was the confidence that Governor Andrew had in the Commissioners' line that he was one of the first to purchase an estate on Brimmer street, without an idea of ever being disturbed; and he ventured to say that if Governor Andrew were alive and before this committee the project would dwindle down to a very small matter.

Mr. Bird disclaimed that the committee had any settled plan, but had only adopted the proposed 500 foot channel as a basis for argument. The committee had by no words or action given parties to understand that they had a definite plan, but had been misrepresented by interested parties.

Mr. Shattuck informed the committee that though they had adopted no plan of action, he wished them to understand that he was present to oppose only the material filling of the flats north of Beacon Street.

Mr. Hill, for the city, disclaimed any other purpose on his part.

Dr. George Derby was then questioned by Mr. Ingalls as to the sanitary effect of filling the water basin, and considered that it would be very injurious to the purity of the air, and promotive of infantile diseases. He said the great benefit of the basin was from its great extent, and its position to allow free scope for the prevalent summer breezes from the west. A portion of the hill which was benefited by the air from over the river was as densely populated as any part of the city. The whole space, though partially bare at low water, he considered more healthful than half the area covered by a deep and swift stream.

Mr. Shattuck offered a communication in the *Atlas and Bee* of March, 1860, against the entire filling of the Back Bay, for sanitary reasons, written by John A. Andrew, in support of the testimony that had been introduced. It was read by Mr. Hill. We make the following extracts:—

BOSTON, March 10th, 1860.

To George H. Snelling, Esq.:—

My Dear Sir,—I have neither been unobservant of your efforts nor indifferent to their success, although I have not been present at your hearings before the legislative committee, concerning the Back Bay and the Common.

* * * * * *

I wish the legislature could have a fortnight's session here in August; or might spend any considerable time in Boston during the summer weather, and thus be led to observe how great a blessing (and to many thousands) this ancient Common is, merely regarded as a retreat from the closer quarters of narrow streets, crowded houses, huddled buildings and humble alleys whence thronging populations emerge to refresh the eye, the blood, the lungs, the cheek; yes, and the fainting soul itself.

Members would then perceive (what *we* do so clearly) that not merely to its own fifty acres of greensward pathway, pond and foliage is due the renovating influence of "*the Common.*" Whence come those soft and cooling breezes? what gives the sense of freedom and enlargement, as the landscape opens? Why is the Common always new and inexhaustible? Those who know not now may one day learn—too late. And thus it is:—Worcester and Berkshire fan it with the air from their broad lawns and hillsides.

The constantly renewed waters of the bay cool them as they pass. The waters themselves; the hills of Norfolk, just beyond them; the free, open sky; and all the variety and beauty and vastness of the landscape, as you look from Beacon Hill to the sunset, combine to create and complete a scene in which Nature pronounces a visible benediction, *felt*, though unheard and indescribable.

Shut out those flowing though quiet waters; build up row upon row of brick or stone for dwellings; people the space now open for the air and sunshine to drift through; cut off that open prospect; and the ten thousand toil-worn men and women and their children, whom we often see of a

summer Sunday afternoon thronging the Common, and tasting of its beauty and its streams of life, suffer a bereavement for which no compensation is promised them, and for which nothing but a miracle could compensate.

With the hope that we have not for the last time seen the Brookline hills,

I am very truly and faithfully yours,

JOHN A. ANDREW.

The committee then adjourned to 3 o'clock, P.M.

AFTERNOON SESSION.

The hearing was resumed at 3 o'clock.

Mr. Albert Boschke, civil engineer of Boston, was examined as an expert. He was of opinion that if a tidal basin was not kept open behind a harbor of a seaport, the result would be that artificial means would have to be used to prevent the formation of shoals in the harbor by the deposits of silt. In illustration of this view of the matter he called attention to the harbor of Baltimore, where there was no tidal basin behind, but where dredging machines had to be constantly employed to keep the harbor clear of shoals. He referred to various maps and plans in illustration of his statements. He reiterated some of the statements made at the last hearing of the committee. In his opinion no harbor could long exist without dredging or scour. In his opinion the tidal basin of Charles River ought not to be reduced. Its reduction would carry deposits of silt into the harbor which were now deposited in the catch or tidal basin.

We have not omitted the testimony of the civil engineer as given above, since it is brief, and at the same time interesting to all scientific men.

The medical testimony very properly dwells on the importance of fresh cool breezes in averting infantile diseases, of which cholera infantum in particular plays a prominent and a tragical part. We can fancy the Demon of that fell scourge, grinning with delight at the prospect of the hecatombs of victims which the consummation of the scheme in question would throw into his hands. Such a consummation would bring a new Massacre of the Innocents, with "Rachel mourning for her children because they are not."

But, the proposed deprivation of pure air would also undoubtedly swell the yearly bills of mortality with an increased list of deaths from typhoid fever—a disease which we all well know affects by preference early adult life. It should not escape the attention of the men of dollars and cents that losses from this portion of the population are just so much taken from the wealth-creating department of the people.

We are encouraged to hope that we may have a full report of the statement of Dr. George Derby—the Secretary of the State Board of Health—for a subsequent issue. The above is no more than a mere hint of what he said.

MR. EDITOR,—The remains of the late Dr. Wm. T. G. Morton, who died suddenly in New York in the summer of 1868, were buried at Mt. Auburn last Saturday, Nov. 13th, in the presence of several physicians of the vicinity, and other gentlemen and ladies, among whom were Hon. Emory Washburn, William Whiting, and Alexander H. Rice, Messrs. Charles Dean, &c. The services were held in the chapel and conducted by Rev. Dr. Lothrop, of this city.

Dr. Morton's name has been so prominently placed before the community in connection with the discovery of the safety and certainty of etherization in capital operations of surgery, that it seems most proper that the following letters should at this time be published in our New England Medical Journal, printed as it is in Boston, where ether was first successfully used by Dr. Morton. The originals of these precious documents, and many more bearing upon the same points, are now in the possession of the heirs of Dr. Morton. Some of them, with the medal received from the National Institute of France, and the two crosses received from the Swedish and Russian governments, and the silver box presented by the unanimous vote of the Trustees of the Massachusetts General Hospital, will probably be ere long committed to the charge of the Massachusetts Historical Society. These five letters, which I propose you should publish, are of great historical value to the future fame of Dr. Morton. They place him among the greatest benefactors of our race, by the side of Jenner, of Watt, of Stephenson, and of all others who by their energy and persistent labors have given inestimable benefits to mankind.

I was acquainted with the introduction of ether into surgical use at the Hospital from the earliest hours, and taken in connection with these letters I feel convinced of the truth of the following propositions.

First, That neither Dr. Warren nor Dr.

Hayward, who everybody admits were the persons who first operated successfully upon patients, after they had previously inhaled ether administered by Dr. Morton, knew at the time of these earliest operations, the exact nature of the substance employed by that gentleman.

Second. Both of them speak of Dr. Morton, and of no one else, in connection with these first experiments.

Third. Dr. Hayward's single letter and the first of Dr. Warren's, were written three days after those operations, and consequently those surgeons may be supposed to know perfectly well to whom they were indebted for the valuable suggestion made.

Fourth. Dr. Warren's second letter was written more than two months after these first successful operations, and when the fame of the discovery of the anæsthetic properties of ether had spread almost, if not quite, over the civilized globe. In that letter the writer tersely, but without equivocation, asserts that to "the best of his knowledge and belief" he, Dr. Warren, "has never heard of the use of sulphuric ether by inhalation as a means of preventing pain in surgical operations, until it was suggested by Dr. Wm. T. G. Morton, in the latter part of October, 1846."

I submit, therefore, that I am right in my statement that these letters are invaluable in their relations to the future fame of Dr. Morton, and that they ought to prove to every unprejudiced mind that those eminent surgeons under whose auspices ether was first administered by Dr. Morton at the Massachusetts General Hospital, meant exactly what Dr. Warren asserts in his last letter, viz., that to Dr. Morton alone is due the first suggestion of etherization in surgery, and to him, therefore, immortal honor is due for this great boon to the whole human race. Yours very sincerely,

HENRY I. BOWDITCH.

No. I.

DEAR SIR,—I write at the request of Dr. J. C. Warren to invite you to be present on Friday morning, at 10 o'clock, at the Hospital, and to administer to a patient who is then to be operated upon, the preparation which you have invented to diminish the sensibility to pain.

Yours respectfully,
C. F. HEYWOOD,
House Surgeon to M. G. Hospital.

Dr. Morton, Tremont Row.

Oct. 14, 1846.

No. II.

Boston, Oct. 17, 1846.

I hereby certify that I have twice seen the administration of Dr. Morton's application for the prevention of pain—that it had a decided effect in preventing the sufferings of the patients during operation, and that no bad consequence resulted.

J. C. WARREN.

No. III.

On Saturday last, at the Hospital, I removed a tumor from the arm of a patient who had immediately before inhaled something prepared by Dr. Morton of this city. The operation lasted seven minutes; the patient gave no indication of suffering. She assured me afterwards that she did not suffer, nor has she to the present time experienced any inconvenience from the inhalation. GEO. HAYWARD.

Tuesday, Oct. 20, 1846.

No. IV.

I certify that I assisted in the administration of Dr. Morton's Preparation, to two patients operated upon by Drs. Warren and Hayward at the Massachusetts General Hospital on the 16th and 17th of October—that under its influence both these individuals submitted to operations lasting from five to ten minutes, without suffering, and that they speedily recovered from its effects. C. F. HEYWOOD,

House Surgeon Mass. Gen. Hospital.

Oct. 22, 1846.

No. V.

Boston, Jan. 6, 1847.

I hereby declare and certify to the best of my knowledge and recollection, that I never heard of the use of sulphuric ether by inhalation as a means of preventing the pain of surgical operations until it was suggested by Dr. Wm. T. G. Morton in the latter part of October, 1846.

JOHN C. WARREN,
Prof. of Anatomy and Surgeon
of Mass. Gen. Hospital.

We were permitted to be present at the services in respect to the memory of Dr. Morton, and are thus enabled to present to our readers the following remarks made at the grave by Dr. Henry I. Bowditch, of this city:—

All civilized communities, and more especially the members of the medical profession residing in them, owe a debt of gratitude to Dr. Morton that is incalculable and which can never be repaid.

As a man and as a physician, I wish now to pay a small tribute of respect to his

memory by throwing a few handfuls of earth upon these dead remains, once the tabernacle of his living, earnest soul. I ask no one to follow me in this apparently poor and trifling service, but I would fain hope that not a few of those now present may think as I do that it is a sacred privilege to be able on this occasion thus publicly to testify their high appreciation of the great value that his life and labors have been to mankind.

Wherever hereafter human suffering shall be liable to occur, let us hope that the blessing of etherization will also be found, and with it ought always to go the never-ending, always increasing fame of Dr. Morton.

It is perhaps needless to add that his remains were covered by the hands of friends.

We cannot forbear alluding to the fact that to the shame of a great and powerful nation his family still remain without that substantial recognition due to him for one of the greatest blessings ever conferred on humanity. The thousands whose sufferings were alleviated in the rebellion is alone sufficient evidence to justify a claim that long ago should have been cancelled. If the General Government is still deaf to the appeals of humanity, let our own State, in which he made his first demonstration and which should be the first to grasp the honor of advocating his claim, take the matter in hand. It is a subject not unworthy the consideration and action of our State Board of Health, and we feel sure if it was presented with the sanction of that body of men for legislation, that justice *must* be done. There is not a member of the Legislature who could not satisfy himself from among his constituents as to the propriety of the claim on the State. When Massachusetts has made her acknowledgment, the other States would have a noble example for the consideration of the authorities at Washington. H. H. A. B.

Harvard Medical School.—The winter course of lectures was opened on the 3d inst. with an introductory address by Dr. R. M. Hodges, Adjunct Professor of Surgery and Clinical Surgery. It was replete with sound advice and practical suggestions, and commanded the closest attention of a large audience from its beginning to its end. The school was never in a more prosperous condition. The number of matriculants this year exceeds all previous ones.

Hæmaturia caused by the internal use of Sulphate of Quinine.—B. F., aged 13 years, had several paroxysms of chills and fever. Quinine was prescribed by the parents on two occasions, which was followed immediately (both times) by hæmorrhage from the mucous membrane of the urinary organs. I was called (August, 1867) to see the boy, and, contrary to the mother's wish, I prescribed ten grains of quinine, to be divided in three doses, and to be given next day, with orders to suspend the medicine, if he should have another attack of the hæmorrhage.

An hour after the third dose had been administered, the patient had a profuse hæmorrhage from the urinary passages.

I advised the parents to dispense with quinine altogether, and prescribed other febrifuge. My little patient was removed to Opelousas, where medical attendance could be obtained at any hour, in case of emergency. An eminent physician of that town was called in to attend to the boy, and again quinine was prescribed and administered, and followed by the same kind of hæmorrhage. He got well after a severe spell of typhoid fever.

The boy is again under my treatment, suffering with chills and fever (tertian). Two weeks ago, his father prescribed and administered three or four doses of an infusion of *cinchona* and Virginia snakeroot, which was followed by hæmorrhage of same organs.

It has been my misfortune to have had another similar case to treat last fall. To a little girl seven years old, quinine was administered in different ways, but was invariably followed by hæmorrhage of the urinary passages.—*New Orleans Journal of Medicine.*

Dr. Robert Lee has placed his anatomical and pathological collection in the Museum of the University of Cambridge. This collection includes those remarkable directions which once gave rise to so much controversy.

In January last there were 45,153 insane paupers in England and Wales.—*Medical Press and Circular.*

Bakers are said to be the *Alum*-ni of London tradesmen.

Medical Miscellany.

In treating a case of poisoning by the cyanide of potassium, which recovered, H. P. Stearns, M. D., of Hartford, Conn., says:—"I used the tube of the stomach-pump, as the patient could swallow nothing, for the purpose of introducing stimulants into the stomach, rather than for the purpose of emptying it, though this was also done. The action of hydrocyanic acid being so very rapid, I had little expectation of lessening its effects by this means; but as this poison is more speedily eliminated from the system than most others, and he had already lived fifteen or twenty minutes after taking it, my design was to stimulate the almost paralyzed heart, if possible, to activity until elimination was effected. I used whiskey, as this was at hand, and, in fact, it did not occur to me in the excitement of the moment to use ammonia, though this is the stimulant most highly recommended, and doubtless may be of service in some cases. It appears to me, however, that in all cases where whiskey can be introduced into the stomach by means of a tube or otherwise, we should expect more permanent effects than from ammonia, and consequently afford the patient a better chance for recovery."—*American Journal of the Medical Sciences.*

A Missouri homœopath in August last volunteered his professional services in the case of a sick infant, six months old, for which he prepared three powders. The first dose so effectually quieted the little patient by lulling it into the sleep of death, that the doctor on being sent for again, thought it a pity that the remaining two powders should be wasted, and accordingly carried them away with him. At the Coroner's inquest, he produced two powders which were shown to be in different paper from the one administered; and was finally forced to confess that the drug used was morphine. Thus is another item added to the list of infant mortality caused by the abuse of narcotics, which is becoming so common in the homœopathic school.—*N. Y. Medical Gazette.*

Parlous Days.—Blood-letting, which was considered necessary, during the last century, for every one, whether sick or well, every spring and fall, was performed by the country surgeons, every Sunday morning, at a charge of sixpence each. Bleeding a lady in bed, in the reign of Charles the Second, 10s., and for a gentleman 1s. or 2s. 6d. Bleeding by the year was done for 16s.

Superstition had marked certain days in each month as dangerous for blood-letting, and these were called *parlous* days. In July, the first, seventh, twelfth, thirteenth, twentieth and twenty-fifth were of the above kind.—*Ibid.*

Health of the French Emperor.—His chief disease has been a fissured hæmorrhoidal tumor, which has prevented him from walking about, sitting on horseback or in a carriage, and which has obliged him to lie down most of the time, or walk awkwardly with "his legs far apart, and stooping forward with the bend at the hip-joints."—*Lancet.*

But few details of the International Medical Congress in Italy have as yet appeared.

MEDICAL DIARY OF THE WEEK.

Monday, 9, A.M., Massachusetts General Hospital, Med. Clinic. 9, A.M., City Hospital, Ophthalmic Clinic.
Tuesday, 9, A.M., City Hospital, Medical Clinic, 10, A.M., Surgical Lecture. 9, A.M., Boston Dispensary. 11, A.M., Massachusetts Eye and Ear Infirmary.
Thursday, 9 A.M., Massachusetts General Hospital, Medical Clinic. 11, A.M., Massachusetts Eye and Ear Infirmary.
Friday, 9, A.M., City Hospital, Ophthalmic Clinic; 10, A.M., Surgical Visit; 11, A.M., Operations. 9, A.M., Boston Dispensary.
Saturday, 10, A.M., Massachusetts General Hospital Surgical Visit; 11, A.M., Operations.

Books and Pamphlets Received.—Transactions of the Twenty-fourth Annual Meeting of the Ohio State Medical Society, held at Columbus, June 8, 9 and 10, 1869. Pp. 180.—Pepsin: Its Physiological and Therapeutical Actions. Remarks made before the New York Medical Journal Association, by J. S. Hawley, A.M., M.D., Greenpoint, N. Y. Pp. 20.—On the Treatment of Uterine Catarrh. By Joseph Krammerer, M.D., Physician to the German Hospital and Dispensary, New York. Pp. 18.

Married,—At South Boston, 10th inst., Marshall L. Brown, M.D., to Mrs. Helen A. Childs, both of Winchendon.—At Boston Highlands, 11th inst., Arthur H. Nichols, M.D., to Miss Elizabeth F. Homer.—At Stoughton, 9th inst., Simeon Tucker, M.D., to Miss Angeline Clark.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending Nov. 13, 1869.

Cities and towns.	Number of deaths in each place.	Prevalent Diseases — Consumption.	Pneumonia.	Typhoid Fever.	Croup.
Boston	80	19	7	3	0
Charlestown	18	6	0	2	1
Worcester . .	10	1	0	1	0
Lowell	17	1	1	1	1
Chelsea . . .	9	1	0	0	0
Cambridge .	7	1	1	0	1
Lawrence . .	7	1	0	2	1
Springfield .	10	3	1	0	0
Lynn	10	2	0	0	0
Pittsfield . .	7	0	0	1	0
Gloucester .	4	0	0	0	2
Fitchburg . .	4	0	0	1	0
Taunton . .	6	1	0	0	1
Newburyport	2	1	0	0	0
Somerville .	2	1	1	0	0
Fall River .	11	5	0	0	2
	204	43	11	11	9

From scarlet fever three deaths occurred in Boston, two in Worcester and two in Pittsfield.

George Derby, M.D.,
Secretary of State Board of Health.

Deaths in Boston for the week ending November 13, 80. Males, 32—Females, 48.—Accident, 2—apoplexy, 1—asthma, 1—disease of the brain, 2—inflammation of the brain, 1—bronchitis, 1—cholera infantum, 1—consumption, 20—convulsions, 1—cyanosis, 2—debility, 5—diarrhœa, 1—dropsy, 1—dropsy of the brain, 2—epilepsy, 1—bilious fever, 1—scarlet fever, 3—typhoid fever, 3—gangrene, 1—gastritis, 2—disease of the heart, 2—hæmorrhage, 1—hernia, 1—intemperance, 1—disease of the kidneys, 1—disease of the liver, 1—inflammation of the lungs, 7—marasmus, 1—old age, 2—paralysis, 1—peritonitis, 1—premature birth, 1—puerperal disease, 1—rheumatism, 1—unknown, 4—whooping cough, 2.

Under 5 years of age, 24—between 5 and 20 years, 9—between 20 and 40 years, 17—between 40 and 60 years, 22—above 60 years, 8. Born in the United States, 47—Ireland, 26—other places, 7.